

from the present relations of the carboniferous rocks to older systems, in this province, it is probable that the sea basins in which gypsum was deposited, were not very extensive. In these sea basins the deposition of gypsum alternated with mechanical deposits of sand and marl, and with the growth of shells and corals; but the conditions which produced beds of gypsum, were unfavorable both to the transport of sediment and the existence of animals or plants.

From a consideration of these facts, I am disposed to refer the formation of gypsum to springs and rivers, containing free sulphuric acid, and poured into seas in which carbonate of lime had been deposited. The sulphuric acid may have been derived from the volcanic regions of the neighboring ranges of older rocks, and may have been a product of the oxidation of iron pyrites, which still abound in some parts of these older strata, either directly by the action of air and water, or, perhaps, indirectly by the formation of sulphuretted hydrogen, and its oxidation in passing through fissures in contact with water and air. To realize the operation of these causes, you need only imagine streams like the South American *Rio Vinaigre* flowing into a sheltered bay containing beds of shells and corals, or into the space between a coast and its coral reef. I do not, however, pretend to explain the mode of former action of anhydrite in this way, though it, like the common gypsum, has evidently been deposited in beds by water."

A letter was read from Dr. S. P. Hildreth, of Marietta, Ohio, dated Aug. 19, 1847, relative to his donation of this evening.

On motion of Mr. Haldeman, a committee was appointed to confer with Mr. A. Vattermare, on the subject of international exchanges. Committee, Prof. Johnson, Dr. Leidy and Mr. Cassin.

Stated Meeting, October 12, 1847.

VICE PRESIDENT MORTON in the Chair.

DONATIONS TO MUSEUM.

Forty specimens, in skin, of European birds. From Prof. Bronn, of Heidelberg, in exchange.

Meandrina cerebriformis, attached to Arca Noë, M. crispa with Serpula and Pyrgonia; Agaricia ampliata with Pyrgonia, Pocilipora damicornis; Megaphyllum with Nobia. From Dr. Wilson.

A mineral, supposed to be new. From Mr. L. J. Germain.

DONATIONS TO LIBRARY.

- Elementary Chemistry, theoretical and practical. By Geo. Fownes, Ph. D., edited, with additions, by Robert Bridges, M. D., 2d edition, 8vo. Philadelphia, 1847. From Dr. Bridges.
- Bridgewater Treatises. Treatise 1. On the adaptation of external nature to the moral and intellectual constitution of Man. By the Rev. T. Chalmers, D. D. Treatise 8th. Chemistry, Meteorology, and the function of digestion. By Wm. Prout, M. D., F. R. S. 8vo. Philadelphia, 1836. From the same.
- Elements of Physics : or natural philosophy, general and medical, &c. By Neil Arnott, M. D. Edited by Isaac Hays, M. D. 8vo. Philadelphia, 1845. From the same.
- Lexicon Scientarium ; a dictionary of terms used in the various branches of Anatomy, Botany, Zoology, &c. By Henry McMurtrie, M. D. 12mo. Philadelphia, 1847. From the Author.
- Histoire des Polypiers coralligènes flexibles, vulgairement nommés Zoophytes. Par J. F. V. Lamouroux. 8vo. A. Caen, 1846. From Mr. Wm. Gambel.
- Henrico Joan. Nepom. Cranz Classis Cruciformium emendata cum fig. aen. in necessarium Instit. Rei Herbariæ Supplementum. 8vo. Lipsiæ, 1769. From Dr. Griffith.
- On the influence of atmosphere and locality, &c. on human health, constituting elements of Hygiène. By Robley Dunglison, M. D. 8vo. Philadelphia, 1835. From the same.
- Hector Bossange: Catalogue des livres anciens. 8vo. Paris, 1846. From the same.
- The American Mineralogical Journal; conducted by Archibald Bruce, M. D. Vol. 1. 8vo. New York, 1814. From the same.

Seven tracts in the Burmese, Chinese, and Hindustan languages, chiefly on religious subjects. From Dr. Dawson of Philadelphia.

A letter was read from Mr. M. W. Rowe, dated New Harmony, Indiana, Oct. 2, 1847, containing some observations on the generation of the Opossum.

Mr. Conrad read a paper, entitled "Observations on the Eocene formation, and descriptions of 105 new Fossils from the vicinity of Vicksburg, Miss.; with an Appendix." Referred to a Committee consisting of Drs. Wilson and Leidy, and Mr. Phillips.

Stated Meeting, Oct. 19, 1847.

VICE PRESIDENT MORTON in the Chair.

DONATIONS TO MUSEUM.

Two vertebræ of a Cetacean and three Chelonian bones; from the green sand of New Jersey. Presented by Dr. J. Thomas.

Sulphuret of Antimony and Tale, from Burmah; also several species of Cypræa from the same. From Dr. Dawson.

Sulphate of Baryta, from Antrim, Ireland. Presented by Mr. Wm. L. Mactier.

Dr. Morton deposited the crania of a Swede, Chenouk Indian, Bengalee, Lapan Indian and ancient Phœnician. Also, a cranium of *Phoca vitulina*, and casts of crania of a Mexican, Burat, Abyssinian and Patagonian.

DONATIONS TO LIBRARY.

Genera Plantarum secundum ordines naturales disposita: Auctor Henrico Endlicher. Fascic. 8-16. 8vo. From Dr. Wm. Darlington.

Versuch über die perspiration einiger mit lungen athmender